

**ABSTRACT**

The present invention provides a method of simultaneously amplifying a plurality of target sequences within sample nucleic acid which comprises: (1) contacting said sample nucleic acid with one or more primer pairs under conditions which allow hybridisation of the primers to the sample nucleic acid, each primer having a bipartite structure A-B wherein part A is specific for a particular target sequence within the sample nucleic acid and part B is a constant sequence which is common to all primers or is common amongst all forward primers with a different sequence common amongst all reverse primers; (b) performing first amplification reaction; (c) degrading the bipartite primers or separating them from the amplification products of the first amplification reaction; (d) contacting the amplification products from the first amplification reaction with primers which comprise part B of the bipartite primers or a nucleotide sequence which is substantially identical to part B, under conditions which allow hybridisation of the primers to the amplification products; and (e) performing a second amplification reaction and kits for use in such methods.